

**EAST Search History**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2	"6521430".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:23
L2	3	"7109034".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:23
L3	1595	electrofusion	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:23
L4	2028	electrofus\$\$	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:23
L5	161	electrofusion same (electrode or microelectrode or micro-electrode )	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:25
L6	342	electrofusion and (electrode or microelectrode or micro-electrode )	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:24
L7	183	electrofus\$\$ same (electrode or microelectrode or micro-electrode )	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:25
L8	4	electrofus\$\$ same ((electrode or microelectrode or micro-electrode or (capillary adj electrode)) same hollow)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:32
L9	13	(electrofus\$\$ or (cell adj fusion)) same ((electrode or microelectrode or micro-electrode or (capillary adj electrode)) same hollow)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:37

## EAST Search History

L10	65	L7 and @ad<"19990730"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:27
L12	7	L9 and @ad<"19990730"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:38
L13	0	L12 and (micropositioner or stereotactic)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:29
L14	7	L7 and (micropositioner or stereotactic)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:29
L16	6	L14 and ( liposome or vesicle or protoplast or proteoliposome)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:39
L17	0	electrofus\$\$ same (((electrode or microelectrode or micro-electrode or (capillary adj electrode)) same hollow) same (microchip or chip))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:37
L18	0	(electrofus\$\$ or (cell adj fusion)) same (((electrode or microelectrode or micro-electrode or (capillary adj electrode)) same hollow) same (microchip or chip))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:33
L19	2	(electrofus\$\$ or (cell adj fusion)) same (((electrode or microelectrode or micro-electrode or (capillary adj electrode)) same hollow) and (microchip or chip))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:33
L20	0	L19 and @ad<"19990730"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:36
L21	2	L9 and (combinator\$\$ adj synthesis)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:35

## EAST Search History

L22	4	L9 and (electroendoosmosis or electrophore\$\$ or Poiseuille)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:36
L23	1	L22 and @ad<"19990730"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:36
L24	0	electrofus\$\$ same (((electrode or microelectrode or micro-electrode or micropipette or (capillary adj electrode)) same hollow) same (microchip or chip))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:37
L25	4	electrofus\$\$ same (((electrode or microelectrode or micro-electrode or micropipette or (capillary adj electrode)) same hollow) )	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:37
L26	13	(electrofus\$\$ or (cell adj fusion)) same (((electrode or microelectrode or micro-electrode or micropipette or (capillary adj electrode)) same hollow)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:40
L27	7	L26 and @ad<"19990730"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:42
L28	4	L27 and ( liposome or vesicle or protoplast or proteoliposome)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:38
L29	4	L28 and ( liposome or vesicle or protoplast or proteoliposome)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:41
L30	2	((electrofus\$\$ or (cell adj fusion)) same (((electrode or microelectrode or micro-electrode or micropipette or (capillary adj electrode)) same hollow)) and ((optical adj trap) or (optical adj trapping))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:40

## EAST Search History

L31	25	L7 and ((liposome or vesicle or protoplast or proteoliposome) and (electroporate or dielectrophore\$\$ or fusogenic))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:42
L32	2	L7 and ((liposome or vesicle or protoplast or proteoliposome) same(electroporate or dielectrophore\$\$ or fusogenic))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:42
L33	8	L31 and @ad<"19990730"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/10/16 13:42

Dialog 10/031,410  
10/16/2006 LLM

? d s

Set	Items	Description
S1	45495	S (ELECTROFUS?? OR (CELL (W) FUSION))
S2	124	(ELECTROFUS?? AND (CELL (W) FUSION)) FROM 5, 24, 28, 34, 35, 40, 41, 45, 50, 65, 71, 73, 91, 94, 98, 110, 135, 136, 143, 144, 155, 164, 172, 185, 357, 369, 370, 391, 434, 467
S3	101	S (ELECTROFUS?? OR (CELL (W) FUSION))(S) ((ELECTRODE OR MICROELECTRODE OR MICRO-ELECTRODE OR (CAPILLARY (W) ELECTRODE))
S4	1	S (ELECTROFUS?? OR (CELL (W) FUSION))(S) ((ELECTRODE OR MICROELECTRODE OR MICRO-ELECTRODE OR (CAPILLARY (W) ELECTRODE)) (S) HOLLOW)
S5	1	S (ELECTROFUS?? OR (CELL (W) FUSION)) AND ((ELECTRODE OR MICROELECTRODE OR MICRO-ELECTRODE OR (CAPILLARY (W) ELECTRODE)) (S) HOLLOW)
S6	0	S S3 AND (MICROPOSITIONER OR STEREOTACTIC)
S7	8	S S1 AND (MICROPOSITIONER OR STEREOTACTIC)
S8	18	S S3 AND ( LIPOSOME OR VESICLE OR PROTOPLAST OR PROTEOLIPOSOME)
S9	0	S S3 AND ((LIPOSOME OR VESICLE OR PROTOPLAST OR PROTEOLIPOSOME) (S) (ELECTROPORATE OR DIELECTROPHORE?? OR FUSOGENIC))
S10	0	S S3 AND ((LIPOSOME OR VESICLE OR PROTOPLAST OR PROTEOLIPOSOME) AND(ELECTROPORATE OR DIELECTROPHORE?? OR FUSOGENIC))
S11	0	S (ELECTROFUS?? OR (CELL (W) FUSION)) (S) ((ELECTRODE OR MICROELECTRODE OR MICRO-ELECTRODE OR (CAPILLARY (W) ELECTRODE)) (S) (MICROCHIP OR CHIP))
S12	0	S (ELECTROFUS?? OR (CELL (W) FUSION)) (S) ((ELECTRODE OR MICROELECTRODE OR MICRO-ELECTRODE OR (CAPILLARY (W) ELECTRODE)) AND (MICROCHIP OR CHIP))
S13	0	S (ELECTROFUS?? OR (CELL (W) FUSION)) AND ((ELECTRODE OR MICROELECTRODE OR MICRO-ELECTRODE OR (CAPILLARY (W) ELECTRODE)) (S) (MICROCHIP OR CHIP))
S14	0	S S3 AND (ELECTROENDOOSMOSIS OR ELECTROPHORE?? OR POISEUILLE OR (COMBINATOR?? (W) SYNTHESIS))
S15	0	S S3 AND ((OPTICAL (W) TRAP) OR (OPTICAL (W) TRAPPING))
S16	29	S S1 AND ((OPTICAL (W) TRAP) OR (OPTICAL (W) TRAPPING))
S17	19	RD (unique items)
S18	1	S S17 AND (ELECTRODE OR MICROELECTRODE OR MICRO-ELECTRODE OR (CAPILLARY (W) ELECTRODE))

?

[File 185] **Zoological Record Online(R)** 1978-2006/Oct  
(c) 2006 The Thomson Corp. All rights reserved.

[File 357] **Derwent Biotech Res.** 1982-2006/Oct W3  
(c) 2006 The Thomson Corp. All rights reserved.

[File 369] **New Scientist** 1994-2006/Aug W3  
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[File 370] **Science** 1996-1999/Jul W3  
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*\*File 370: This file is closed (no updates). Use File 47 for more current information.*

[File 391] **Beilstein Reactions** 2006/Q3  
(c) 2006 Beilstein GmbH. All rights reserved.

[File 434] **SciSearch(R) Cited Ref Sci** 1974-1989/Dec  
(c) 2006 The Thomson Corp. All rights reserved.

[File 467] **ExtraMED(tm)** 2000/Dec  
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```
? s (electrofus?? or (cell (w) fusion))
Processing
Processing
Processing
       616   ELECTROFUS??
14443209   CELL
     842991   FUSION
      45003   CELL(W) FUSION
S1      45495   S (ELECTROFUS?? OR (CELL (W) FUSION))

? S (ELECTROFUS?? and (CELL (W) FUSION))
Processing
Processing
>>>E:java.net.SocketTimeoutException: Read timed out

? S (ELECTROFUS?? OR (CELL (W) FUSION))(s) (electrode or microelectrode or
micro-electrode or (capillary (w) electrode))
Processing
Processing
       616   ELECTROFUS??
14443209   CELL
     842991   FUSION
      45003   CELL(W) FUSION
      503003   ELECTRODE
      44583   MICROELECTRODE
       144   MICRO-ELECTRODE
     481548   CAPILLARY
      503003   ELECTRODE
       160   CAPILLARY (W) ELECTRODE
```

S3 101 S (ELECTROFUS?? OR (CELL (W) FUSION))(S) ((ELECTRODE OR MICROELECTRODE OR MICRO-ELECTRODE OR (CAPILLARY (W) ELECTRODE))

? S (ELECTROFUS?? OR (CELL (W) FUSION))(S) ((ELECTRODE OR MICROELECTRODE OR MICRO-ELECTRODE OR (CAPILLARY (W) ELECTRODE)) (s) hollow)

Processing

Processing

616	ELECTROFUS??
14443209	CELL
842991	FUSION
45003	CELL (W) FUSION
503003	ELECTRODE
44583	MICROELECTRODE
144	MICRO-ELECTRODE
481548	CAPILLARY
503003	ELECTRODE
160	CAPILLARY (W) ELECTRODE
97933	HOLLOW

S4 1 S (ELECTROFUS?? OR (CELL (W) FUSION))(S) ((ELECTRODE OR MICROELECTRODE OR MICRO-ELECTRODE OR (CAPILLARY (W) ELECTRODE)) (S) HOLLOW)

? t s4/medium

4/3/1 (Item 1 from file: 357) Links

Derwent Biotech Res.

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0063955 DBA Accession No.: 87-08303 PATENT

**High-voltage biological macromolecule transfer system**

**- with adjustable amplitude and number of pulses; useful for cell fusion and transfer of DNA**

**Patent Assignee:** Wong D T 1987

**Patent Number:** US 4663292 **Patent Date:** 870505 **WPI Accession No.:** 87-143200 ( 8720 )

**Priority Application Number:** US 684599 **Application Date:** 841221

**National Application Number:** US 684599 **Application Date:** 841221

**Language:** English

? S (ELECTROFUS?? OR (CELL (W) FUSION)) and ((ELECTRODE OR MICROELECTRODE OR MICRO-ELECTRODE OR (CAPILLARY (W) ELECTRODE)) (S) HOLLOW)

Processing

616 ELECTROFUS??  
14443209 CELL  
842991 FUSION  
45003 CELL(W) FUSION  
503003 ELECTRODE  
44583 MICROELECTRODE  
144 MICRO-ELECTRODE  
481548 CAPILLARY  
503003 ELECTRODE  
160 CAPILLARY (W) ELECTRODE  
97933 HOLLOW  
944 ((ELECTRODE OR MICROELECTRODE) OR MICRO-ELECTRODE) OR CAPILLARY (W) ELECTRODE (S) HOLLOW

S5 1 S (ELECTROFUS?? OR (CELL (W) FUSION)) AND ((ELECTRODE OR MICROELECTRODE OR MICRO-ELECTRODE OR (CAPILLARY (W) ELECTRODE)) (S) HOLLOW)

? s s3 and (micropositioner or stereotactic)

101 S3  
231 MICROPOSITIONER  
42878 STEREOTACTIC  
S6 0 S S3 AND (MICROPOSITIONER OR STEREOTACTIC)

? S S1 AND (MICROPOSITIONER OR STEREOTACTIC)

45495 S1  
231 MICROPOSITIONER  
42878 STEREOTACTIC  
S7 8 S S1 AND (MICROPOSITIONER OR STEREOTACTIC)

? s s3 and ( liposome or vesicle or protoplast or proteoliposome)

101 S3  
95000 LIPOSOME  
193333 VESICLE  
50655 PROTOPLAST  
2785 PROTEOLIPOSOME  
S8 18 S S3 AND ( LIPOSOME OR VESICLE OR PROTOPLAST OR PROTEOLIPOSOME)

? S S3 AND ((LIPOSOME OR VESICLE OR PROTOPLAST OR PROTEOLIPOSOME) same(electroporate or dielectrophore\$\$ or fusogenic))

>>>W: Invalid syntax

>>>E: There is no result

? S S3 AND ((LIPOSOME OR VESICLE OR PROTOPLAST OR PROTEOLIPOSOME) (s)(electroporate or dielectrophore?? or fusogenic))

101 S3  
95000 LIPOSOME  
193333 VESICLE  
50655 PROTOPLAST  
2785 PROTEOLIPOSOME  
161 ELECTROPORATE  
308 DIELECTROPHORE??  
7041 FUSOGENIC  
1224 ((LIPOSOME OR VESICLE) OR PROTOPLAST) OR PROTEOLIPOSOME) (S) ((ELECTROPORATE OR DIELECTROPHORE??) OR FUSOGENIC)  
S9 0 S S3 AND ((LIPOSOME OR VESICLE OR PROTOPLAST OR PROTEOLIPOSOME) (S) (ELECTROPORATE OR DIELECTROPHORE?? OR FUSOGENIC))

? S S3 AND ((LIPOSOME OR VESICLE OR PROTOPLAST OR PROTEOLIPOSOME) and(ELECTROPORATE OR

DIELECTROPHORE?? OR FUSOGENIC))

101 S3  
95000 LIPOSOME  
193333 VESICLE  
50655 PROTOPLAST  
2785 PROTEOLIPOSOME  
161 ELECTROPORATE  
308 DIELECTROPHORE??  
7041 FUSOGENIC

S10 0 S S3 AND ((LIPOSOME OR VESICLE OR PROTOPLAST OR PROTEOLIPOSOME)  
AND(ELECTROPORATE OR DIELECTROPHORE?? OR FUSOGENIC))

? S (electrofus?? or (cell (w) fusion)) (s) ((electrode or microelectrode or  
micro-electrode or (capillary (w) electrode)) (s) (microchip or chip))

Processing  
Processing

616 ELECTROFUS??  
14443209 CELL  
842991 FUSION  
45003 CELL(W) FUSION  
503003 ELECTRODE  
44583 MICROELECTRODE  
144 MICRO-ELECTRODE  
481548 CAPILLARY  
503003 ELECTRODE  
160 CAPILLARY(W) ELECTRODE  
11290 MICROCHIP  
144667 CHIP

S11 0 S (ELECTROFUS?? OR (CELL (W) FUSION)) (S) ((ELECTRODE OR MICROELECTRODE OR  
MICRO-ELECTRODE OR (CAPILLARY (W) ELECTRODE)) (S) (MICROCHIP OR CHIP))

? S (ELECTROFUS?? OR (CELL (W) FUSION)) (S) ((ELECTRODE OR MICROELECTRODE OR  
MICRO-ELECTRODE OR (CAPILLARY (W) ELECTRODE)) and (MICROCHIP OR CHIP))

Processing

616 ELECTROFUS??  
14443209 CELL  
842991 FUSION  
45003 CELL(W) FUSION  
503003 ELECTRODE  
44583 MICROELECTRODE  
144 MICRO-ELECTRODE  
481548 CAPILLARY  
503003 ELECTRODE  
160 CAPILLARY(W) ELECTRODE  
11290 MICROCHIP  
144667 CHIP

S12 0 S (ELECTROFUS?? OR (CELL (W) FUSION)) (S) ((ELECTRODE OR MICROELECTRODE OR  
MICRO-ELECTRODE OR (CAPILLARY (W) ELECTRODE)) AND (MICROCHIP OR CHIP))

?

? S (ELECTROFUS?? OR (CELL (W) FUSION)) and ((ELECTRODE OR MICROELECTRODE OR  
MICRO-ELECTRODE OR (CAPILLARY (W) ELECTRODE)) (S) (MICROCHIP OR CHIP))

Processing  
Processing

616 ELECTROFUS??  
14443209 CELL  
842991 FUSION  
45003 CELL(W) FUSION  
503003 ELECTRODE  
44583 MICROELECTRODE  
144 MICRO-ELECTRODE

481548 CAPILLARY  
 503003 ELECTRODE  
   160 CAPILLARY (W) ELECTRODE  
 11290 MICROCHIP  
 144667 CHIP  
   2898 (((ELECTRODE OR MICROELECTRODE) OR MICRO-ELECTRODE) OR  
 CAPILLARY (W) ELECTRODE) (S) (MICROCHIP OR CHIP)  
 S13       0 S (ELECTROFUS?? OR (CELL (W) FUSION)) AND ((ELECTRODE OR MICROELECTRODE OR  
 MICRO-ELECTRODE OR (CAPILLARY (W) ELECTRODE)) (S) (MICROCHIP OR CHIP))  
  
 ?  
 ? s s3 and (electroendoosmosis or electrophore?? or Poiseuille or (combinator?? (w)  
 synthesis))  
   101 S3  
   15 ELECTROENDOOSMOSIS  
 72558 ELECTROPHORE??  
   7478 POISEUILLE  
 20218 COMBINATOR??  
 6143579 SYNTHESIS  
   43 COMBINATOR?? (W) SYNTHESIS  
 S14       0 S S3 AND (ELECTROENDOOSMOSIS OR ELECTROPHORE?? OR POISEUILLE OR  
 (COMBINATOR?? (W) SYNTHESIS))  
  
 ? s s3 and ((optical (w) trap) or (optical (w) trapping))  
   101 S3  
 1609125 OPTICAL  
   194908 TRAP  
   2779 OPTICAL (W) TRAP  
 1609125 OPTICAL  
   194227 TRAPPING  
   2147 OPTICAL (W) TRAPPING  
 S15       0 S S3 AND ((OPTICAL (W) TRAP) OR (OPTICAL (W) TRAPPING))  
  
 ? S S1 AND ((OPTICAL (W) TRAP) OR (OPTICAL (W) TRAPPING))  
   45495 S1  
 1609125 OPTICAL  
   194908 TRAP  
   2779 OPTICAL (W) TRAP  
 1609125 OPTICAL  
   194227 TRAPPING  
   2147 OPTICAL (W) TRAPPING  
 S16       29 S S1 AND ((OPTICAL (W) TRAP) OR (OPTICAL (W) TRAPPING))  
  
 ? rd  
 >>>W: Duplicate detection is not supported for File 391.  
 Records from unsupported files will be retained in the RD set.  
 S17       19 RD (UNIQUE ITEMS)  
  
 ? s s17 AND ((ELECTRODE OR MICROELECTRODE OR MICRO-ELECTRODE OR (CAPILLARY (W)  
 ELECTRODE))  
 >>>W: Unmatched parentheses  
 >>>E: There is no result  
  
 ? s s17 AND (ELECTRODE OR MICROELECTRODE OR MICRO-ELECTRODE OR (CAPILLARY (W) ELECTRODE))  
   19 S17  
 503003 ELECTRODE  
   44583 MICROELECTRODE  
   144 MICRO-ELECTRODE  
 481548 CAPILLARY  
 503003 ELECTRODE  
   160 CAPILLARY (W) ELECTRODE

S18 1 S S17 AND (ELECTRODE OR MICROELECTRODE OR MICRO-ELECTRODE OR (CAPILLARY  
(W) ELECTRODE) )

? t s18/medium

18/3/1 (Item 1 from file: 73) [Links](#)

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EMBASE

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10974383 EMBASE No: 2001018546

**Microfluidic device for combinatorial fusion of liposomes and cells**

Stromberg A.; Karlsson A.; Ryttsen F.; Davidson M.; Chiu D.T.; Orwar O.

O. Orwar, Department of Chemistry, Goteborg University, S-412 96 Goteborg Sweden

Analytical Chemistry ( ANAL. CHEM. ) ( United States ) 01 JAN 2001 , 73/1 (126-130)

**CODEN:** ANCHA **ISSN:** 0003-2700

**Document Type:** Journal ; Article

**Language:** ENGLISH **Summary Language:** ENGLISH

**Number Of References:** 27